Preliminary Amendment -59-Clean Copy of Amendments Markl, et al. § 371 Patent Application of PCT/EP00/08129 filed February 20, 2002

Abstract

The present invention relates to a nucleic acid molecule comprising a nucleic acid sequence which codes for a haemocyanin, a haemocyanin domain or a fragment thereof with the immunological properties of at least one domain of haemocyanin, and comprising at least one intron sequence. The invention further relates to constructs which comprise the nucleic acid molecule and, where appropriate, a promoter suitable for expression control. In a preferred embodiment, the construct further comprises a nucleic acid sequence which codes for an antigen. The invention moreover relates to host cells which contain these nucleic acid molecules and/or constructs. The invention further relates to recombinant expression of the nucleic acid molecules and/or constructs in the host cells. The invention further relates to haemocyanin, a haemocyanin domain, a fragment with the immunological properties of at least one domain of haemocyanin and haemocyanin fusion proteins, which are coded by the nucleic acid molecules and/or constructs. The invention further relates to pharmaceutical compositions which comprise the nucleic acid molecules and/or haemocyanin, a haemocyanin domain, a fragment thereof or a fusion protein. The invention further relates to liposomes which comprise the nucleic acid molecules and/or haemocyanin, a haemocyanin domain, a fragment thereof or a fusion protein. The invention further relates to antibodies which are obtainable by immunization of a test animal with haemocvanin, a haemocyanin domain, a fragment thereof or a fusion

Preliminary Amendment -60-Clean Copy of Amendments Markl, et al. § 371 Patent Application of PCT/EP00/08129 filed February 20, 2002

protein, and the use thereof in screening methods for the identification of tumours.